S. A. Green
J. A. Maruszewski
D. H. Miller
J. M. Blundon
T. M. Hendrickson
C. U. Broman

STEEL
an LTV company

Environmental Control Division

March 3, 1981

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John P. Lehman, Director
Hazardous and Industrial Waste Division
Office of Solid Waste (WH-565)
U.S. Environmental Protection Agency
Washington, D.C. 20460

Dear Mr. Lehman:

Enclosed is a Petition for Exclusion for the sludge resulting from the treatment of mixed waste waters at the Indiana Harbor Works of Youngstown Sheet & Tube Company. The Youngstown Sheet & Tube Company is a part of the LTV Corporation and its facilities are operated in conjunction with those of Jones & Laughlin Steel Corporation.

If there are any questions concerning this submittal, please advise this office.

Very truly yours,

George C. Smith

George C. Smith, Technical Coordinator

/yh

Attachment

Petitioner's
Exhibit #27

PETITION FOR EXCLUSION

A. Petitioner's Name and Address:

Youngstown Sheet & Tube Company
3 Gateway Center
Pittsburgh, PA 15230

Address Correspondence to:

George C. Smith, Technical Coordinator - Environmental Control
Jones & Laughlin Steel Corporation
900 Agnew Road
Pittsburgh, PA 15227
(412) 884-1000, ext. 208

B. The petitioner is engaged in the manufacture of flat rolled and tubular finished steel products at its Indiana Harbor Works in East Chicago, Indiana. This petition requests the delisting of sludge, effectively listed by virtue of the mixed waste rule as EPA hazardous waste No. F006; produced from the treatment of mixed waste waters, one source of which originates as rinse water from an electrolytic chrome plating operation. This action is requested because the waste sludge produced does not meet the criteria for which it was listed.

As shown by the attached data, the constituents for which this waste is listed are present at extremely low levels or are leached at levels consistently and significantly below applicable EP limits. Hexavalent chromium was not detected in any sample leachates. Total chromium was determined to constitute approximately 0.2% - 0.8% of the sludge on a dry basis but is in a relatively immobile form since total chromium levels were significantly below EP limits for all sample leachates. Cadmium was either not detected or present at levels near analytical detection limits for all leachates; and cadmium was found to constitute only 0.0002% of the sludge on a dry basis. Nickel was present at low levels in sample leachates and was determined to constitute only 0.01% of the sludge on a dry basis. Cyanide was either not detected or present at very low levels in sample leachates and constituted only 0.0006% to 0.005% of the total sludge on a wet basis. Levels of all EP toxic metals were well below the maximum EP toxicity level.

C. Waste process waters from cold rolling mills, pickling rinses, strip galvanizing, and rinse waters from the electroplating of tin and chrome are all combined and treated in a single central treatment plant. Treatment is by floculation, oil floatation and clarification, with ferrous chloride as the floculant and pH control with lime. End products of treatment include skimmed oil reclaimed as fuel, effluent water whose quality is controlled to NPDES permit limits and dewatered sludge.

D. The total flow to the treatment plant from all sources varies from 5,000 GPM to 10,000 GPM of which less than 500 GPM is estimated to have originated as rinse water from the electrolytic chrome plating line. It is estimated that the production of sludge generated from the treatment of the combined waters is 15,000 tons (dry basis) annually.